1989 EDITORIAL INDEX

MANAGEMENT

The structure of the quality revolution Jan.p.18
Working like a chef Jan.p.24
Management by policy deployment Jan.p.28
Information integration Mar.p.16
Retail scanner data Mar.p.20
Cycle time Apr.p.29
Europe 1992 . . . . . .Apr.p.35
Join forces for total quality control . . . . . May p.24
Managing the product development process . . . Aug.p.29
Data Aug.p.Q5
A study of quality curriculums . Sep.p.18
Education, training or both? . . Sep.p.20
Baldrige Award builds interest in quality Sep.p.64
The EC phenomenon Nov.p.26
Criteria for the FMS investor . .Dec.p.Q24

INSPECTION

Laser triangulation sensors . . .Jan.p.46
CAT scans for industry Feb.p.26
Cutter design Feb.p.32
Coating thickness Feb.p.38
Inspection services Mar.p.34
Contract measurement Mar.p.35
Commercial metrology labs . . Mar.p.38
Automated image analysis in metallurgy Mar.p.58
Corrosion gaging Apr.p.33
Focusing on small holes Apr.p.40
Visual inspection—Dynascopes .Apr.p.46
The quality 500 . . . . . May p.30
Pacemaker data Aug.p.Q12
Streamlining CMM part programming Sep.p.27
Inspecting aging aircraft . . . Nov.p.18
Flexible inspection systems for turned parts Nov.p.34
CMM standards Dec.p.Q3
Mathematizing Y14.5 . . . . .Dec.p.Q10
Mechanical tolerancing workshop Dec.p.Q16
The road to a DMIS standard .Dec.p.Q24

PROCESS QUALITY CONTROL

SPC on the plant floor Jan.p.36
Data collection Mar.p.28
SPC express Apr.p.58
McGraw-Edison's SPC quality program Apr.p.62
Front-end SPC . . . . . May p.36
Production line color control . . Aug.p.20
Live SPC Aug.p.Q10
Real-time SPC is hot Oct.p.26
HPLC for quality control Oct.p.30
The power of process information Oct.p.39
Nonwoven polyester Nov.p.46
Data acquisition on the shop floor Nov.p.50
Disk drive data Nov.p.52
Erasable magneto-optic disk technology Nov.p.56
SPC successes Dec.p.16
Metal stampings aided by SPC . Dec.p.22
SPC to C_{pk} 2 . . . . . Dec.p.25
SPC software listing Dec.p.30

QUALITY ENGINEERING

Automation's phase 3 . . . . . Jan.p.18
Fixturing for greater CMM productivity Mar.p.44
Advanced metrology for cylindrical surfaces Apr.p.16
Electronic gage amplifiers . . . Apr.p.22
Fretting Apr.p.27
Communitywide SPC Apr.p.66
Leak detection in quality control . . . . . May p.50
Moving up the quality learning curve Jun.p.18
The software interface Jun.p.24
Quality software update—June, 1989 . . . . . Jun.p.30
Boost your IQ Aug.p.14
Data acquisition with programmable controllers Aug.p.Q6
A CMM calibration method . . . Sep.p.32
Transient voltage Sep.p.46
Rediscovering the Abbott-Firestone curve Sep.p.50
Using refrigerant gas for leak detection Nov.p.40

PROCUREMENT

Buying and justifying machine vision Sep.p.41
Supplier quality audits Sep.p.58
Motorola to suppliers: Apply for award Sep.p.59

RELIABILITY ENGINEERING

Aerospace maintenance using ultrasonics Sep.p.69

QUALITY CONTROL IN MANUFACTURING

Quality in automation Oct.p.18

QUAL LAB

The promise of NIR spectroscopy Feb.p.44
Analytical instruments on the process line . . . . . May p.Q5
NMR tests product quality . . . May p.Q8
Quality inside out . . . . . May p.Q12
Software adapts lab instruments to QC . . . . May p.Q14
Submicron particle sizing . . May p.Q18

INSTRUMENTATION SCOUTING REPORTS

Inspecting nuclear reactor tubing Jan.p.63
Beech *Starship* is flawless . . . Feb.p.6C
Computerized NDT system improves quality Mar.p.66
Videophone speeds problem solving Apr.p.75
Measuring coating thickness . . May p.61
Color quality control simplified . Jun.p.61
Temperature compensation in precision measurements . . . Aug.p.53
Auto industry paint improved . . Sep.p.78
On-site hardness testing Oct.p.51
More than a driving test Nov.p.65
Miniborescope improves deburring process Dec.p.69
Hand-held thickness gage saves time Dec.p.69

BASIC TRAINING REVIEW

Tolerance intervals for process capability Jan.p.59
Bounded by extreme values . . Feb.p.59
Defect codes Mar.p.64
Interaction box plots Apr.p.71
An ANOVA alternative . . . . . May p.57
Address sample variation . . . Jun.p.59
Keep it simple Aug.p.51
C_{pk} equivalencies Sep.p.75
Estimating AOQL for zero nonconformance Oct.p.49
C_{pk}, C_r Oct.p.49
Multiple fixture SPC Nov.p.63
Calibrating pitch diameter . . . Dec.p.71

EDITORIAL COMMENT

Congratulations! Jan.p.5
The stillness Feb.p.5
Schools are for learning Mar.p.5
Land of opportunity—maybe . . .Apr.p.5
Symptoms of lunacy . . . . . May p.5
The user reigns—as in user friendly Jun.p.5
It won't get any better soon . . Aug.p.5
On the other hand Sep.p.5
Looking better Oct.p.5

. . . continued

Learning the hard way Nov.p.5
With best wishes for the nineties Dec.p.5

QUALITY WATCH

Motorola, Westinghouse nuclear fuel unit, Globe Metallurgical named Malcolm Baldrige National Quality Award winners Jan.p.13
Volt and ohm value changes approved, take effect in 1990 Feb.p.13
Service quality improvement focusing on how well carriers perform Mar.p.13
Mathematizing Y14.5 standard .Apr.p.15
Manufacturers must take the lead in quality training . . . . . May p.15
Quality Expo TIME attendance sets new record, tops 25,000 . . .Jun.p.15
Sematech awards five joint development contracts . . . Aug.p.13
Guidelines, labels issued for implementing new volt and ohm representations Sep.p.13
National Quality Month activities East and West Oct.p.13
FAA orders ultrasonic tests of older DC-10 engines, proposes key repairs to aging aircraft . Nov.p.13
Florida Power and Light is first international winner of Deming Prize Dec.p.13

QUALITY AND THE LAW

Mixed emotions Jan.p.77
An attack of perspective . . . Feb.p.68
No respecter of persons . . . Mar.p.69
Behind closed doors Apr.p.76
Locking the barn door Jun.p.62
Scapegoats Aug.p.56
Deal the government in Sep.p.83
Calling the shots Oct.p.106
Open season Nov.p.67
Chain of distribution Dec.p.75

THE QUALITY SCENE

Beyond affluence Jan.p.79
Computer crime Feb.p.70
What is process capability capable of? Mar.p.71
Lifetime employment is out . . .Apr.p.78
The imperious executive . . . May p.96
Malcolm Baldrige National Quality Award Jun.p.64
9858 circles the globe Aug.p.58
Attila as consultant Sep.p.85
Advertising fantasies and engineering specifications . Oct.p.108
Soviet workers draw dividends! Nov.p.69
Artificial intelligence? Dec.p.77

MANAGEMENT VIEWPOINT

Employee theft. Jan.p.81
Quality: Key to success in the global marketplace. Feb.p.72
Crisis management. Mar.p.73
Managing a growing company. .Apr.p.80
The business-media relationship May p.98
Children and the corporation . .Jun.p.66
Technology, tenacity and timing Aug.p.60
Lessons from deregulation . . Sep.p.87
HR manager's job restructured Oct.p.110
The people factor Nov.p.71
Preparing for creativity Dec.p.79

QUALITY AT RANDOM

A quality problem Mar.p.100
SPC—an interview Apr.p.132
Faults, failures, and a metrics revolution. Jun.p.69
Crime and the criminal justice system Sep.p.90

SPECIAL FEATURE

Becoming the best, part 1, Popplewell & Wildsmith . . . Jan.p.67
Becoming the best, part 2 . . . Feb.p.49
Becoming the best, part 3 . . . Mar.p.49
Becoming the best, part 4 . . . Apr.p.49
Becoming the best, part 5 . . . May p.39
Becoming the best, conclusion. Jun.p.49

AUTHORS

Anzelmo, John . . . . . May p.Q12
Barrentine, L.B. Jun.p.59
Bell, Marcus K. Jan.p.36
Berrett, Donald Apr.p.62
Besterfield, Dale H. Mar.p.64
Bobbitt Jr., Charles E. Sep.p.58
Bovee, Gregory R. Mar.p.20
Brickeen, Brian Oct.p.49
Burke, William J. Jan.p.42
Carnavale, Edmund Apr.p.33
Carlyle, John M. Nov.p.18
Casto, Roger Mar.p.35
Cole, Howard C. Mar.p.44
Christensen, Robert W. Feb.p.38
Clark, O.Melville Sep.p.46
Clements, Richard Apr.p.66
Coyle, Rick. Apr.p.46
Crosby, Phillip B. Jan.p.24
Dauciunas, Vince . . . . . May p.Q5
Dovich, Robert A. . . . . May p.57
Drews, William E. Apr.p.16
Drews, William Sep.p.50
Duff, Jerald L. Jan.p.18
Dumas, Roland A. . . . . May p.24
Fechter, William F. Apr.p.29
Feit, Edward Sep.p.69
Foley, Richard Nov.p.52
Gebhardt, Joan E. Mar.p.100
Geppert, Hans Dec.p.Q24
Gilmore, Jeff Feb.p.26
Golightly, Robert Jun.p.18
Gould, Lawrence Nov.p.65
Grabowski, Joseph M. Sep.p.18
Gross, Thomas S. Mar.p.28
Hocken, Robert J. Dec.p.Q3
Humphries, Mark Nov.p.56
Hurayt, Gerald Feb.p.59
Hurayt, Gerald Oct.p.49
Infelise, Nick Aug.p.Q6
James, Paul D. Jan.p.59
James, Paul D. Sep.p.75
Jankowski, Dave Oct.p.51
Johns, Chris Feb.p.26
Jones, Brian S. Dec.p.25
Kaczmarek, Mike Apr.p.58
Kadar, Y. Mar.p.58
Kador, John . . . . . May p.36
Karasikev, N. Mar.p.58
Kriss, Mitchel Mar.p.20
Kuehl, Donald. . . . . May p.Q14
Larson, Brandon Nov.p.63
Lewis, Thomas E. . . . . May p.Q8
Logee, Stephen Sep.p.27
Lorditch, George M. Aug.p.20
Lovitt, Mike Oct.p.39
Lynch, Anthony Aug.p.29
McAndrews, Gerard Nov.p.52
McCormick, Meg Aug.p.Q12
McCormick, Meg Oct.p.39
Metzger, Andre Ap.p.35
Morris, David . . . . . May p.50
Mueller, William Feb.p.44
Musa, John D. Jun.p.69
Nandyal, Ray K. Dec.p.70
Neshta, Bob Dec.p.Q22
Newcomb, John E. Jan.p.28
Nicoli, David F. . . . . May p.Q18
Palmer, Kelvin. Apr.p.22
Parks, Carey J. Jun.p.24
Persico, John Sep.p.90
Reimann, Curt W. Sep.p.64
Richardson, Rick Sep.p.32
Roberts, Bill. Apr.p.27
Sagar, Paul Aug.p.53
Santay, William Aug.p.51
Schmidt, Roland P. Oct.p.26
Seifert, Charles Apr.p.40
Shankar, Nitin K. Nov.p.34
Shoolery, James N. . . . . May p.Q8
Siegel, J.I. Mar.p.58
Suchy, Bob Apr.p.66
Thomas, Joseph W. Dec.p.17
Thornton, Jack Dec.p.22
Townsend, Patrick L. Mar.p.100
Unis, Max J. Mar.p.38
Vahaviolos, Sotirios J. Nov.p.18
Veale, Ralph C. Dec.p.Q3
Vito, Richard Nov.p.52
Waltsie, James Aug.p.Q10
Wachtler, William R. Aug.p.53
Wade-Clark, Carole Oct.p.30
Wedge, Gary Aug.p.14
Weniger, Werner Sep.p.50
Weston, Jeffrey M. Mar.p.16
Weston, Jeff Nov.p.50
Wiese, David R. Jan.p.46
Williams, Edward Nov.p.40
Worthington, William C. Nov.p.56
Wurster, Ralph Apr.p.132
Zuech, Nello Sep.p.41